FIRE DEPARTMENT SITE PLAN CHECK LIST

Water supply

- o Show & label existing main (Identify County or City water lines) Identify the following:
 - Pipe size material
 All water lines servicing hydrant shall be 8-inch ductile iron pipe or C900
 - Fire hydrant valves, tees, bends, crosses, plug, etc
 - Detail all taps and Fire Department Connections (FDC).
 - *Note on plan*: No pressure reducing valves to be placed on fire lines. All fire lines are to be inspected prior to covering.
- O Show current flow test information on plans. (Less than one year). Results shall appear on the General Notes Sheet section pertaining to Water.
 - A minimum of 1000 G.P.M.'s is required on all fire hydrants in the City of Woodstock.
- Show hydrant and water vault details if applicable (Detail is obtained from the City of Woodstock).
- o Where a full NFPA 13 sprinkler system is required a separate fire tap is required.

Fire Hydrants

Location

- Show fire hydrant spacing as measured along an approved Fire Department access road surface:
 - 500 lineal feet measured along an approved Fire Department access road for single family subdivision when distances between homes are more than 10 feet apart.
 - 300 lineal feet measured along an approved Fire Department access road for attached residential dwellings, town homes and commercial property.
- o Fire hydrants need to be located within 50-feet and on the same side of the road with the Post Indicator Valve and Fire Department Connection (where required).
- Where possible, fire hydrants should be located more than 40' from structures.
- o Fire hydrants will be numbered with a unique identifier on all plans. This identifier will be related to the location and flow test data submittal, as detailed below.

- Note on plans all below: Submit longitude, latitude, and elevation data for all new and relocated hydrants, along with the flow test data in an approved electronic format to the Fire Marshal's office prior to the issuance of a Certificate of Occupancy.
 - This is to be done prior to the final Fire Inspection.
 - Horizontal (longitude and latitude) locations should be referenced to the US State Plane coordinate system, NAD 83 (2011), GA West Zone, US Survey Feet.
 - Vertical (elevation) locations should be referenced to the NAVD88 datum, GEOID12A, US Survey Feet.
 - <u>Approved electronic format</u>: excel spreadsheet (.xls or .xlsx extension, Microsoft Office version 2003 and up) with the following data fields
 - Unique Hydrant ID
 - Street Address (If Applicable)
 - Longitude (X)
 - Latitude (Y)
 - Elevation (Z)
 - Static (PSI)
 - Residual (PSI)
 - Flow (PSI)
 - Flow (GPM)
 - Date of Flow Testing (MM/DD/YYYY)
 - Condition (Standard, Usable, Unusable)
 - Paint Color
 - Please submit electronic data to bstilson@woodstockga.gov be reviewed by Development Services, Fire, and GIS departments.

Installation

- Fire hydrants shall be installed so that the centerline of all hydrant steamer connections is to be a minimum of 18-inches above grade or the barrel flange is to be 6-inches above the finished grade.
- The Steamer connection shall face the mid-line of the street for accessibility.
- o *Note on plans:* Hydrants shall have 3-feet of surrounding unobstructed area. (2012 IFC)
- The steamer connection must face the mid-line of the street for accessibility. Add a note to the plans or a dimension to the "Typical Fire Hydrant Installation" detail indicating compliance with this requirement.
- o *Note on plans*: Fire hydrants to be installed and operable prior to any building construction.

Testing

- Note on plans all below: Fire hydrants must be tested prior to issuance of the Certificate of Occupancy. The test will consist of but not limited to flowing the fire hydrants, painting the hydrants and properly greasing the discharge outlets and stem. After completion notify the Fire Marshal with documentation of the testing.
 - Testing fire hydrants: test static, residual and flow G.P.M. (gallons per minute) at 20 PSI
 - Paint fire hydrants: paint hydrants silver.
 - Color code top barrel of fire hydrant to match flow.
 - 1. Orange = 500-999 G.P.M.'s
 - 2. Green = 1000-1499 G.P.M.'s
 - 3. Blue = 1500 G.P.M.'s and above.
- o Grease: Grease discharge outlets and hand tight hydrant cops. Stems must be greased or properly lubricated.

Street Width and Fire Department Access

- O An all-weather (impervious) Fire Department access road with a minimum width of 20 feet shall be provided within 150 of all portions of the first (1st) floor of the proposed building(s) as required by the 2012 International Fire Code Section 503.1. The area required for turning Fire Department Engines must be verified with appropriate turning radius template (s).
- Provide details of all access roads required to meet the American Association of State and Highway Transportation Officials (AASHTO) design manual live load standard HS20 (75,000 lbs.) with an unobstructed width of not less than 20 feet, 25 foot inside radius, 50 foot outside turning radius and an unobstructed vertical clearance of not less than 13 feet 6 inches.
- o Show all road names, right-of-way width, street width, cul-de-sac radii.
- o Minimum approved, unobstructed, all-weather, drivable surface width is 20 feet and does not include curb and gutter.
- o Fire Lanes (No Parking Zones) are required around portions of building(s) to prevent blockage of Fire Department apparatus access. This requirement must meet the sign and marking specifications listed in the International Fire Code 503.3 Show Fire lane locations with markings and design specifications listed on the plans.
- Dead end fire apparatus access road(s) that exceed 150 feet in length shall be provided with an approved method for turning Fire Department vehicles around as required by the International Fire Prevention Code Section 503.2.5
- o Multiple entrances to site where required in the 2012 International Fire Code and local ordinances. City Ordinance 15.305. Development of one- or two- family dwellings where

the number of dwelling units exceeds thirty (30) shall be provided with Two (2) separate and approved fire apparatus access roads and shall meet the requirement of section 15.302.

- See Chapter 15 of the LDO for fire department access requirements for high rise buildings.
- o Fire Apparatus access roads shall not exceed a 10 percent grade.
- Provide reasonable accessibility to and around all buildings for firefighting equipment, including fire department ground ladders on multiple story projects. A minimum of ten (10) feet on all sides of the building shall be provided for such access.
- o Gates on fire apparatus access roads shall comply with Chapter 15 of the LDO.

Building Structure Features

- o An <u>approved</u> automatic sprinkler system is required for all commercial structures over 3500 square feet and attached dwellings.
- o Access control devices must open upon activation of the fire alarm or power failure.
- Building separation shall comply with the International Building Code Table 602.
 Indicate either approved building separation in feet or indicate the firewall rating used to separate the occupancies.
- Utility Service equipment must meet the protective guidelines of the National Fire Prevention Association.
- o Transformers must be shown 10-feet or more from building structures and 14-feet from doors
- o Bollard protection must be shown around transformers and utility meters when located beside driveway areas.